

# APPROVAL SHEET

## (RoHS)

CUSTOMER : \_\_\_\_\_  
CUSTOMER'S PART NO : \_\_\_\_\_  
DESCRIPTION : \_\_\_\_\_  
PART NO. : RT11S16-Series  
DATE : 2021/04/16 : *SGT*  
AUTHORIZED BY \_\_\_\_\_

|            | FULLY APPROVED | PARTIALLY APPROVED | REJECTED |
|------------|----------------|--------------------|----------|
| SIGN       |                |                    |          |
| SUGGESTION |                |                    |          |

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# Networking Communication Components

## RT Series

### **LAN Transformer**

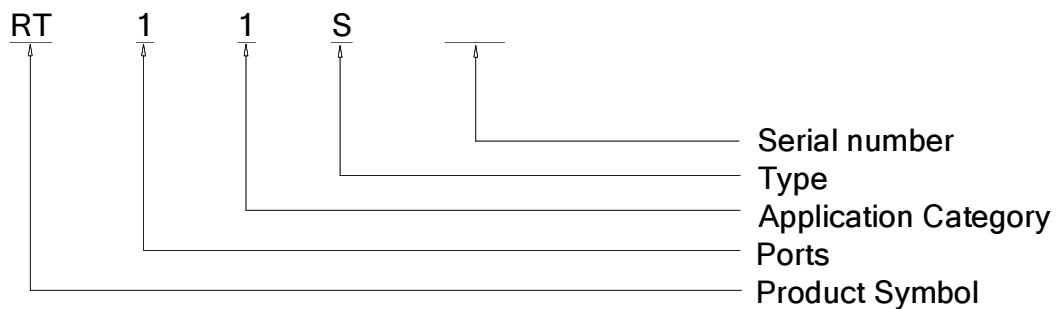
Part number: RT11S16-RU

Part name :10/ 100 Transformer Single Port

### **Feature**

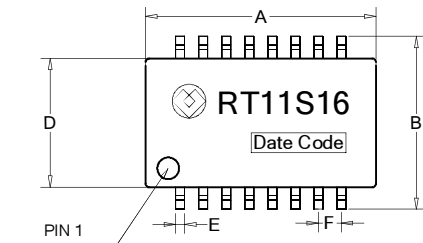
- Compliant and peak reflow temperature rating 245°C .
- Meets IEEE802.3 specification.
- Excellent common mode noise suppression.
- Packaging specification is reel.  
( RT11S□□ : Reel )

### **Part number code**

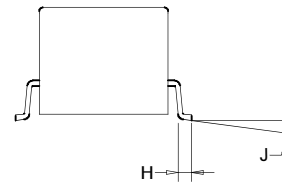
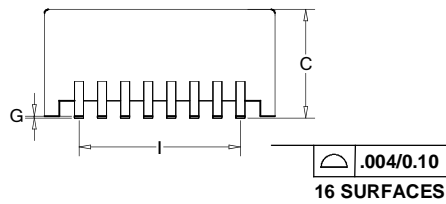
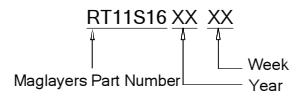




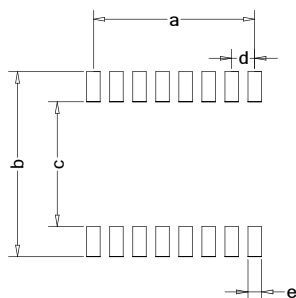
## Mechanical Dimension and Marking



| UNIT | mm                  | inch                |
|------|---------------------|---------------------|
| A    | 12.80 +0.254/-0.254 | 0.504 +0.010/-0.010 |
| B    | 9.30 +0.254/-0.254  | 0.366 +0.010/-0.010 |
| C    | 5.65 +0.254/-0.254  | 0.222 +0.010/-0.010 |
| D    | 6.90 +0.254/-0.254  | 0.272 +0.010/-0.010 |
| E    | 0.46 +0.127/-0.127  | 0.018 +0.005/-0.005 |
| F    | 1.27 +0.254/-0.254  | 0.050 +0.010/-0.010 |
| G    | 0.25 +0.127/-0.127  | 0.010 +0.005/-0.005 |
| H    | 0.70 +0.127/-0.127  | 0.028 +0.005/-0.005 |
| I    | 8.89 +0.254/-0.254  | 0.350 +0.010/-0.010 |
| J    | 0°- 8°              |                     |



## Suggested Land Pattern

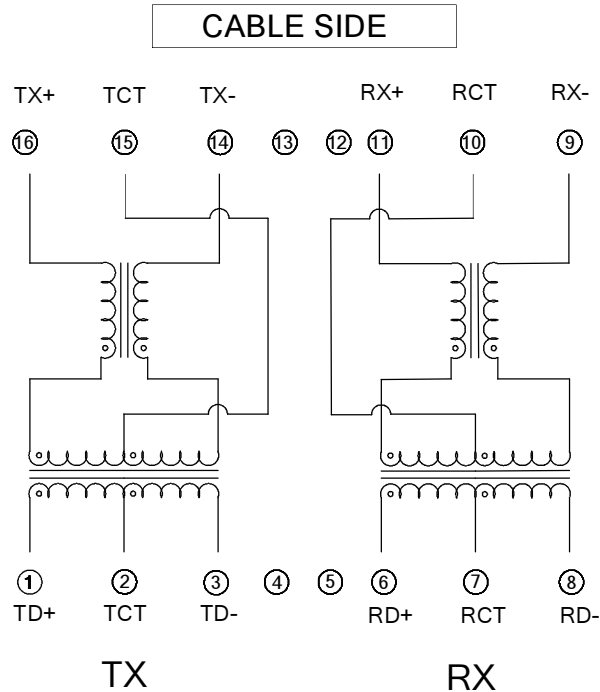


| UNIT | mm    | inch  |
|------|-------|-------|
| a    | 8.89  | 0.350 |
| b    | 10.20 | 0.405 |
| c    | 6.86  | 0.270 |
| d    | 1.27  | 0.050 |
| e    | 0.76  | 0.030 |

|       |             |          |             |          |              |
|-------|-------------|----------|-------------|----------|--------------|
| Drawn | James.Cheng | Designed | James.Cheng | Approved | Vincent. Hsu |
|-------|-------------|----------|-------------|----------|--------------|

## Schematics

RT11S16



N.C. pins: ④ ⑤ ⑫ ⑬

## Electrical Specification @ 25°C, Humidity 65% RH

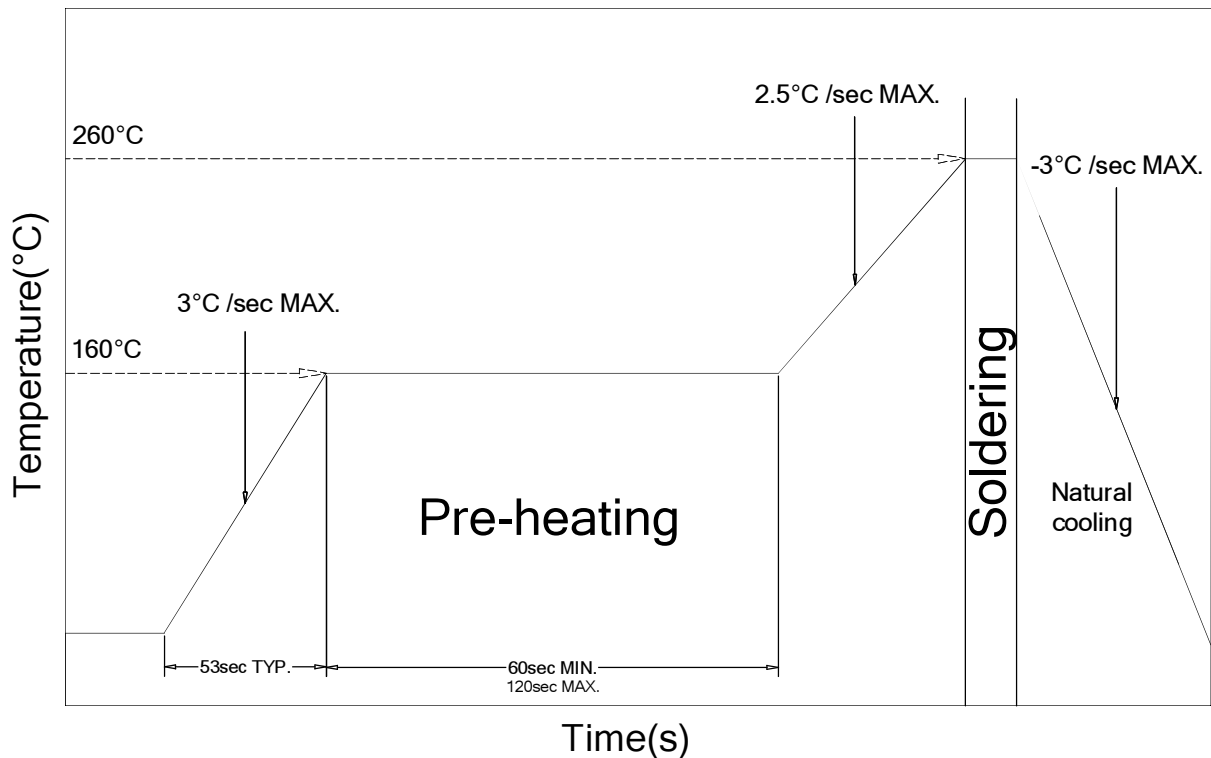
Inductance @ Phy side(OCL)  
100KHz, 0.1V, 8mA DC Bias  
350uH MIN

| Part Number | Turns Ratio |        | Insertion Loss<br>dB MAX | Return Loss<br>dB MIN |       |       | DMCR<br>dB MIN |       |        | Crosstalk<br>dB MIN |       |        | Hipot<br>Vrms, Sec    |
|-------------|-------------|--------|--------------------------|-----------------------|-------|-------|----------------|-------|--------|---------------------|-------|--------|-----------------------|
|             | 100KHz      | 100KHz |                          |                       |       |       |                |       |        |                     |       |        |                       |
|             | TX          | RX     | 1MHz-100MHz              | 30MHz                 | 60MHz | 80MHz | 30MHz          | 50MHz | 100MHz | 30MHz               | 60MHz | 100MHz | Pri To Sec @60Hz, 1mA |
| RT11S16     | 1:1±3%      | 1:1±3% | -1.1                     | -20                   | -14   | -11.5 | -42            | -37   | -33    | -45                 | -40   | -35    | 1500, 60              |

Operating Temperature: 0°C to +70°C.  
Storage Temperature: -25°C to +105°C  
JSDEC Moisture: Level 1



## Reflow Soldering

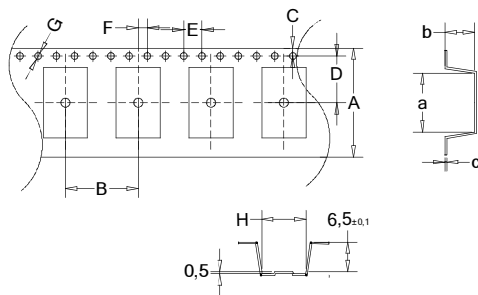


- **IR Reflow soldering :**  
Preheat at 3°C per second to 160°C and using lead free solder, IR at 260°C for 10 seconds.
- **Rework flow:**  
Component must withstand two IR reflow cycles with a cool down between cycles
- Temperature is measured at the terminal portion of product (Using thermocoupler for measurement).
- This profile is reference data we recommend. Please check in your actual process.
- For reliable soldering, the thickness of solder paste screen should be over the terminal co-planality.
- The cutted end of terminal has no plating (out of subject of solder ability).

## Packaging Styles

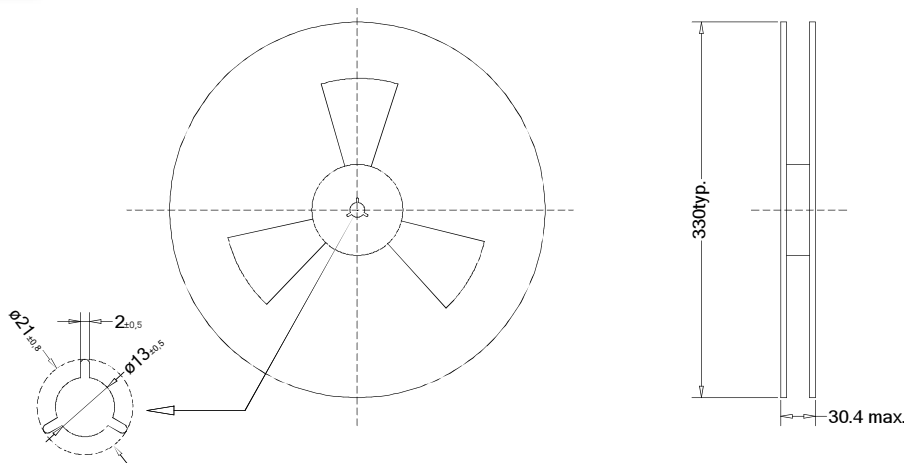
Per 13" reel : 650 pieces

## Tape Dimensions



| UNIT | mm          | UNIT | mm          |
|------|-------------|------|-------------|
| A    | 24.00± 0.30 | F    | 2.00± 0.10  |
| B    | 16.00± 0.10 | G    | 1.50± 0.10  |
| C    | 1.75± 0.10  | H    | 9.70± 0.10  |
| D    | 11.50± 0.10 | a    | 13.00± 0.10 |
| E    | 4.00± 0.10  | b    | 6.50± 0.10  |
| 10*E | 40.00± 0.20 | c    | 0.40± 0.05  |

## Reel Dimensions



Dimensions in mm

## Recommended Condition For Long Term Store

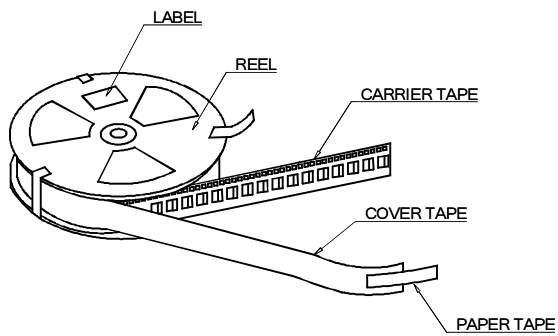
When it stores for a long term, please avoid place of high temperature and high humidity.

Recommend that it uses after the delivery within 1 year.

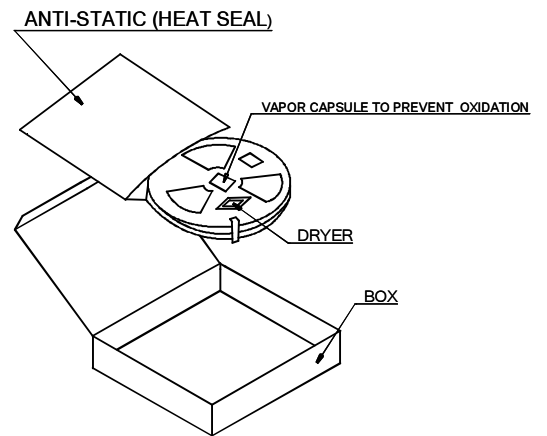
- Temperature range: +5 to +30°C.
- Humidity: 60(%)RH max..
- All dimensions meet EIA-481-C requirement.

## Package Specification

650 pieces / reel



1 reel / BOX



2 BOX / CARTON  
1300 pieces / CARTON

